Gene sets

{g1, g3, g4, g5} exp. set:
{g2, g4, g8} up or down

{g1, g7} pathways:
{g2, g5, g6} up and down

Microarray data (log based)
samples: \(A_{1..K}\) \(B_{1..L}\)
conditions:
genres:

1-on-1 comparison

Two-sample t-test

\[ t_{kl} = \frac{(m - M)}{\sqrt{s^2/n + S^2/N}} \]

Summarization and meta-test

\[ x = -\frac{1}{L} \sum_{kl} \log P_{kl} \quad P(X > x) \sim Gamma(K,1) \]